



GOLDEN GLOW
PHOTOGRAPHY OPPORTUNITIES

OVER LAKE YAXHA



LIVE THE SUNSET ON THE YAXHA LAGOON

1st edition January 2019 2nd edition, February 2019 3rd edition, September 2020

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This report was made with the cooperation of the administrators of the Yaxha Nakum and Naranjo National Park to share knowledge about the neotropical flora and fauna that exists in this area of Guatemala. This material can be used by students, teachers, and researchers to communicate the potential of Yaxha Nakum and Naranjo Park for research and tourism. It also includes a learning tool for biodiversity conservation for any person and organization.











FRONT COVER PHOTOGRAPH:

Sunset from location Hotel Ecolodge El Sombrero. Photography by: David Arrivillaga, FLAAR Mesoamerica, Jan. 19, 2019, 5:07 p.m. Yaxha, Petén, Guatemala. Camera: Huawei Pg.

TITLE PAGE PHOTOGRAPH:

Trees that can be seen as you go up the steps of location # 5 Pirámide Astronómica Mayor, between Plaza G and Plaza F. Photography by: Juan Pablo Fumagalli, FLAAR Mesoamerica, Jan. 19, 2019, 5:07 p.m. Yaxha, Petén, Guatemala. Camera: Iphone Xs.



CONTENT PHOTOGRAPHY:
Location # 1. View from the PNYNN Visitor Center.
Photography by: Elena Siekavizza, FLAAR Mesoamerica, Jan.
22, 2019, 5:38 p.m. Yaxha, Petén, Guatemala.
Camera. Google Pixel 3 XL.

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SERIE











FLAAR Mesoamerica (Foundation for Latin American Anthropological Research) is a nonprofit Guatemalan institution founded under the direction and enthusiasm of experienced Biologist Eduardo Sacayón and Dr Nicholas Hellmuth. Dr Hellmuth, a specialist of Classic Mayan iconography and temple-pyramid, palace and ballcourt architecture. Hellmuth's research evolved to focus on edible and utilitarian plants of the biodiverse ecosystems of Guatemala that were available to the Maya of past and present.

The work done at FLAAR Mesoamerica consists of the methodological compilation of facts about nature, flora, fauna, history, and cultures of Mesoamerica. It also includes publishing it to a largest audience, both in Guatemala and around the world. One goal is to promote the country around the world for its diversity of birds, pollinators, mammals, amphibians, reptiles, photogenic flowering and non-flowering Neotropical plants in wetlands, forests, savannas, and other remarkable habitats from bosque seco, monte espinoso, seasonal rain forests to cloud forests.

We have an experienced team specialized in advanced high-resolution digital photography and wide-format inkjet printing. Our in-house graphic designers can produce educational material about nature to donate to school classrooms in remote mountain and rain forest areas. Our Mayan-speaking team facilitates having our educational material in several Mayan languages, and we will be adding material in Garifuna for our project in Municipio de Livingston.

Likewise, our work has arisen from the interest and support of the board directors of FLAAR Mesoamerica, President Flor de María Setina, Vice president María Alejandra Gutiérrez, Secretary Rodrigo Girón, Treasurer Oscar Lambourg, and (Vocal) Elsa Morales.

One of our main objectives at FLAAR Mesoamerica is to increase consciousness about caring and protecting Mesoamerican natural diversity. By utilizing high-resolution photography, we can better showcase the remarkable flora and fauna of Guatemala. These photographs, and the accompanying information, will awake the admiration and desire in those who follow our work. Thus, the FLAAR Mesoamerica teams create educational material about the biodiversity that deserves recognition and protection.

We also are inspired to provide for all our readers plenty of annotated suggestions of lots of other reports, articles, thesis, dissertations, and web sites via our bibliographies of suggested additional reading. Our focus is generate materials that are easy to read, educational, reliable, and visually pleasing by using lots of full-color photographs -just like this report!

Our newest project is to adequate this technical information to help children learn about biodiversity and how to protect endangered species by MayanToons books and educational animated videos. Our illustrated books and animations are made for primary school children and Mayan families in Guatemala to have access to information about the need to protect the fragile ecosystems and flora and fauna throughout this country.

We are open to work with, share, and, expand our accomplishments with other organizations, institutions, or companies that share our vision. You can find more of our work throughout the different digital platforms of our directory:

www.flaar-mesoamerica.org www.digital-photography.org www.maya-ethnozoology.org www.maya-ethnobotany.org







NATIONAL PARK YAXHA NAKUM NARANJO

Yaxha-Nakum-Naranjo National Park is a site of great natural and cultural importance for our country. Due to the diversity of species it holds, both flora and fauna are classified as a RAMSAR site because it comprises three types of wetlands identified by the Wetlands Convention: temporary lagoons, karst systems and peatlands. Of these systems, the Yaxha and Sacnab lagoons, the Lankaja, Champoxte and Juleque lagoons of the Yaxha lagoon stand out.

In reference to the cultural importance that this protected area represents, it contains heritage from the Pre-Hispanic Mayan period that includes 292 recognized sites of which four are monumental archaeological sites: Yaxha, Nakum, Naranjo and Topoxte. Six other intermediate archaeological sites: Naranjito, El Carmen, La Pochitoca, Poza Maya, El Bajón and El Pital, as well as 282 other minor archaeological sites within its limits (PNYNN Master Plan, 2006).





View of Laguna Yaxha from temple 216, one of the wetland systems declared by RAMSAR.

Photography by: Nicholas Hellmuth, FLAAR Mesoamerica, Jan. 22, 2019, 5:38 p.m. Yaxha, Petén, Guatemala.

Camera: Nikon D5. Lens: 100mm. Settings: 1/80 sec;f/11.0; ISO 125.

PREFACE

The sun setting over the southwest end of Lake Yaxha is a visual and photographic opportunity that is worth experiencing. We have worked together with the IDAEH and CONAP park administrators and park rangers to find five locations where you can experience the sunset.

- DR. NICHOLAS HELLMUTH FLAAR USA - FLAAR MESOAMERICA



Location # 4. View from Temple 216, East Acropolis.

Photography by: Nicholas Hellmuth, FLAAR Mesoamerica. Yaxha, Petén, Guatemala.

Camera: Canon EOS 5D. Lens: EF24-105mm. Settings: 1/400 sec; f/9; ISO 100.

MAP TO SHOW 5 LOCATIONS AT

YAXHA TO PHOTOGRAPH SUNSET

- 1. | Visitor's Center (at park entrance)
- 2. Camping site area adjacent to the lakeshore
- 3. Structure 142, North(west) Acropolis
- 4. Temple 216, East Acropolis
- 5. Pirámide Astronómica Mayor, Plaza G

You can also watch the sunset from Nakum. However, in Nakum the lake is not in front of the observer, so there is no image reflection on any lake to photograph. We will show the Nakum sunset in a separate future FLAAR report.



Own elaboration FLAAR Mesoamerica

LOCATION OPTION #1, VISITOR'S CENTER

When the phrase "sunset at Yaxha" is mentioned, everyone thinks of Temple 216, as most people prefer to climb a pyramid to see the sun setting behind the hill over Lake Yaxha. However, you can also see, experience, and photograph the sunset from other locations such as the visitor's center, from the lakeshore below Yaxha ruins, or on the shore of Lake Yaxha in front of hotel Ecologge El Sombrero.

If you prefer not to climb "a hundred steps" up to the top of a pyramid, there are many places along the lakeshore where you can easily see and photograph the sunset. We recommend that you ask your tour guide to take you down to the shore to enjoy this experience. The photos here were taken from the Visitor's Center.

To reach the shore, park your car in front of the buildings at the park's entrance, walk to the left of the Visitor's Center building, and head straight to the lake (less than walking across the narrow side of the soccer field). However, be sure a vehicle is brought down too in case you do not want to climb back up to the parking lot, especially not in the dark. Beware, do not wade into the water as crocodiles may be lurking around.



Location #1. View from the PNYNN Visitor Center.

Photograph by: Elena Siekavizza, FLAAR Mesoamerica. Yaxha, Petén, Guatemala.

Camera: Google Pixel 3 XL.

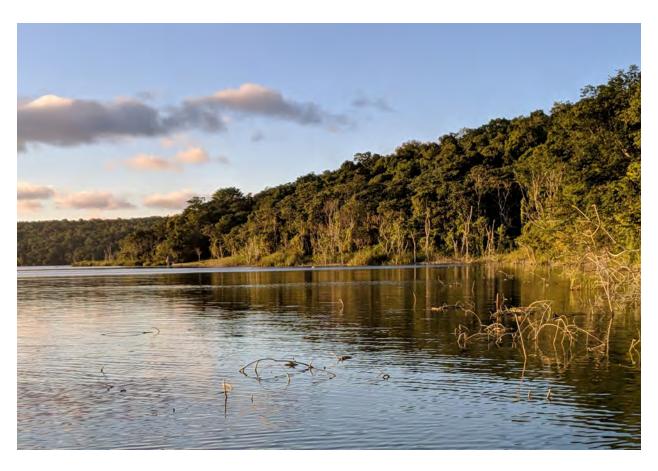


LOCATION OPTION #2,

CAMPING SITE AREA ALONG THE LAKESHORE

Along the shore, below the Yaxha ruins there are three areas to watch the sun setting and do nice photography:

- From the boat dock, below the camping site
- From the shore, on the road before reaching the soccer field and IDAEH's campsite
- At the end of the Mayan sacbe that comes down the hill all the way from the ruins



View from the pier at the entrance to the road, in the camping area. Photography by: Elena Siekavizza, FLAAR Mesoamerica, Sep. 29, 2019, 5:38 p.m. Yaxha, Petén, Guatemala. Camera: Google Pixel 3 XL.



LOCATION OPTION #3,

STRUCTURE 142, NORTHWEST ACROPOLIS

When FLAAR carried out the mapping of Yaxha over a five-year period in the 1970's, we named the northern acropolis as "Northwest Acropolis", in order not to impinge on the name of the North Acropolis of Tikal. However, to this day, most maps of Yaxha call it the North Acropolis.

In this area, there is a nice pyramid to climb and where you can watch the sun descend behind the hills overlooking the lake. In December 2018, we did only daytime photography from this acropolis pyramid, and we had programmed to do test photography of the sunset from the North(west) acropolis in January 2019. However, due to our busy schedule, we had to postpone the sunset experience.



While taking panorama pictures at Yaxha in late December, Sebastian, Roxana and I decided to climb the Structure 142 to get a better view. This structure is located in between two other pyramids and is the tallest of the North(West) plaza. Therefore, there is a great view of the other pyramids within the acropolis and of the rainforest trees, although these trees block the view of the lake.

The staircase was not complete, so we had to go up in zigzags and being very careful where we stepped on so we would not slip. It was not an easy task to reach the top, but it is completely worth it! We recommend climbing down before it gets too dark though.

From the base of the structure you do not notice how tall the temple is, until you reach the top and realize you are above all the surrounding trees. You have a 360-degree view of the treetop canopy of Peten jungle! It is like watching an ocean of trees all around you. It is an impressive place where the first thing you feel is peace.

While climbing down the pyramid, Roxanna decided to sit on every step to make it easier to descend, while I decided to do it sideways.

Although we have not yet gotten all the panorama equipment to the top of this pyramid at sunset time, we show some daytime photographs taken from this acropolis by Sebastian and Roxanna.



Sebastian Molina and Roxana Leal (both university students who work with FLAAR Mesoamerica) climbing Structure 142, Northwest Acropolis, to install the Gigapan system.

Photograph of Nicholas Hellmuth from half a kilometer away (it is in the pyramid of the observatory adjacent to Plaza G). Jan. 19, 2019, 5:25 p.m, Yaxha, Petén, Guatemala. Camera: Nikon D810. Lens: Nikon AF-S NIKKOR 800mm. Settings: 1/200 sec; f/5.6; ISO 500.

The top of this pyramid is usually not crowded. However, there are no wooden steps or railing to hold onto as you climb. Therefore, I would not recommend trying to climb it if it has rained recently nor climbing back down in the dark if night falls quickly (due to clouds). However, you can still watch the sun setting and photograph the sunset experience from this pyramid, as long as you climb down while there is still some light.

Perhaps, when future park budgets are available, eventually, a wooden stairway (with railings) will be built so that you can climb up and down safely. The "sunset experience at Yaxha, reflected off on the lake waters", is becoming known worldwide and attracting more tourists to Yaxha.

The benefit of trying out this pyramid to get a sunset view, is that it has a great view of the other pyramids within the same North(west) Acropolis and you are surrounded by lots of rainforest trees, allowing you to see arboreal cacti, orchids, and bromeliads. Just be aware that the trees block most of the lake itself.

We at FLAAR Mesoamerica are also working on lists of trees, bromeliads, arboreal cactus, and other epiphytes that can be seen from the top of each "sunset pyramid." So far, the best epiphyte views are from Location Option #5 (described later in this report) as the platform is surrounded by trees.



Tourists climbing structure 142 to observe the sunset. Photography by: Nicholas Hellmuth, FLAAR Mesoamerica, Jan. 19, 2019, 5:42 p.m. Yaxha, Petén, Guatemala. Camera: Nikon D810. Lens: Nikon AF-S NIKKOR 800mm. Settings: 1/125 sec; f/5.6; ISO 500.

LOCATION OPTION #4,

TEMPLE 216, EAST ACROPOLIS

Temple 216 is the best known location to experience the sunset in Yaxha and therefore many tourists crowd at the top to photograph it, as is you can see below.

!!

The photo is a bit pixelated as this temple is more than a kilometer away from where I am taking the photo with an 800mm prime telephoto lens; from a JPG (if we had Capture One software) we could use the NEF RAW file and get a higher resolution. On the other hand, with a low-res image no individual can be identified (only by themselves) since we respect people's privacy. Also, if the photos are all high-resolution, the PDF weighs too much and is not easy to send or recieve



Tourists climbing structure 216 (Temple of the Red Hands) to watch the sunset. Photography by: Nicholas Hellmuth, FLAAR Mesoamerica. Yaxha, Petén, Guatemala. Camera: Nikon D810 Lens: Nikon AF-S NIKKOR 800mm. Settings: 1/125 sec; f/7.1; ISO 400.







Temple 216.Photograph by: Nicholas Hellmuth, FLAAR Mesoamerica. Yaxha National Park, Petén, Guatemala. Camera: NIKON D5. Lens: 35mm. Settings: 1/80 sec; f/11.0; ISO 200.

LOCATION OPTION #5,

GREATER ASTRONOMICAL PYRAMID, BETWEEN PLAZA G AND PLAZA F

This pyramid is located between Plaza G and Plaza F, it has a comfortable wooden stairway so you can easily climb it and the top is flat (no temple), so you have a 360-degree view.

From this pyramid, in one direction you can see the Lagoon and in the other directions you can see the rest of the Yaxha temples. The visitor can also observe many orchids, bromeliads, arboreal cactus vines, and other epiphytes found in the canopies of trees around the pyramid. This sunset photograph was taken from this pyramid at mid-January 2019.

We photographed the sunset from this pyramid in mid-January 2019; this is the first time we did not climb Temple 216 to photograph the sunset. In December, the temple was so crowded it was not realistic to get into a good position with the considerable amount of equipment that we have with us (it takes six people to carry just the basic camera equipment, lenses, tripods, etc).

Based on the results of the photographs, we consider that climbing the Greater Astronomical Pyramid to enjoy the sunset, it is a viable alternative instead of climbing Temple 216 (which can be easily visit earlier in the day).

!!

As you see in these particular photographs, on the top of Piramide Astronomica Mayor Plaza G, there are trees at eye level and above your camera level as well, placing you "in the middle of the jungle".

On Temple 2016 and North(west) Acropolis you are "above the jungle." Each location has plus points (we like all five options!), however, it is easier to do photography in options 1, 2, 3, and 5. In option 4, Temple 216, is usually so crowded that you cannot walk around to select the best view point.



CONCLUSION:

WHERE AND WHEN TO PHOTOGRAPH SUNSET OVER LAKE YAXHA?

There are five locations where you can easily get a beautiful photograph of the sunset colors over Lake Yaxha. Temple 216 is the best known, however, according to the season or the holidays, it can be crowded and you cannot take a photo without a dozen people's heads being in the view.

In December 2018, we noticed the crowds atop Temple 216 and we suggested to the park administrators that we would test other locations to show visitors that they can easily get a good view from other locations. We want to encourage visitors to watch the sunset from one of the other pyramids or from the lakeshore and to climb Temple 216 mainly in the morning or early afternoon.



Templo 216 to see the sunset over the Yaxha lagoon. Photography by: Maria Alejandra Gutiérrez, FLAAR Mesoamérica, Jan. 22, 2019, 5:31 p.m. Yaxha, Petén, Guatemala. Camera: Gooqle Pixel 3 XL.



ADDITIONAL TIPS AND SUGGESTIONS

FOR VISITORS TO PARQUE NACIONAL YAXHA, NAKUM AND NARANJO

- Using a tripod at any archaeological site, museum, or national park usually requires a permit.
- It is helpful to use a camera that accepts high ISO without inflicting splotchy results. Nikon D5 and Canon EOS 1DX Mark II are good examples of cameras specifically made to support high ISO.
- oldinectly at the sun, in theory, it can burn its way through the lens directly onto your sensor. So, it is best not to leave the glass of the camera or phone lens pointed directly at the sun, except for the few seconds you are taking a photograph. I usually protect these devices with a shirt or a blanket.
- Personally, some days I use a 200mm lens while other team members use 50mm or zoom lenses, it all depends on the view you wish to present. Occasionally we do panoramas (usually with Apple iPhone Xs or Google Pixel 3 XL).



Photographic equipment tested to capture the sunset from location # 3 Structure 142, Northwest Acropolis. Photography by: Roxana Leal, FLAAR Mesoamerica, Dec. 21, 2018, 11:29 a.m. Yaxha, Petén, Guatemala. Camera: iPhone XS.



Camera mounted to take photos from location # 5 between Plaza la Plaza G and Plaza F. Photography by: Nicholas Hellmuth, FLAAR Mesoamerica, Jan. 19, 2019, 5:26 a.m. Yaxha, Petén, Guatemala. Camera: iPhone XS.

THE RIGHT TIME

The sun sets early in winter and later in the summer.

The position of the sun relative to other pyramids and hills also changes in winter and in summer. In October and December 2018 and January 2019, we got good sunset views. We expect the same when we return in spring and summer (we visit Yaxha one week every month).



The color of the sunset varies day by day, but 90% of the sunsets are photogenic. The quantity and location of clouds makes a difference but a totally clear blue sky also results in a gorgeous photographic and visual experience.

If it is raining, with total cloud cover, it may not be the best day for any sunset.

Although the sun sets behind a hill, you can still see the image reflection on the surface of the lake.

ITINERARY PLANNING

By the time you climb down the pyramid or walk away from the lakeshore, it is evening time. You can either camp in the campsite area or stay at hotel Ecolodge El Sombrero.

The next day you can hike, ride a bicycle, or have a 4WD ride to Nakum. Nakum temples, pyramids and palaces are different from the ones at Yaxha. Although they belong to the same culture they are from different periods, in Nakum you can see primarily the Late Classic. Be sure to be accompanied by a local registered guide from Peten. There are jaguars and pumas visible along the trail, another good reason to have a local guide with you. In a wet year, at the height of the rainy season, not even a 6-wheel drive vehicle could get you to Nakum! However, 2018 and 2019 were very dry, even during the rainy season, so the road was passable almost every month (most people who tried with a 4WD SUV said they got stuck though). If you prefer, you can also rent a bicycle at the Visitor's Center to ride the 17 kms to Nakum.



Sunset from location # 1, Visitor Center.

Photography by: Elena Siekavizza, FLAAR Mesoamérica, Jan. 22, 2019, 5:38 p.m. Yaxha, Petén, Guatemala.

Camera: Pixel 3 XL.

YAXHA DIVERSITY

In a wet year, at the height of the rainy season, not even a 6-wheel drive vehicle could get you to Nakum! However, 2018 and 2019 were very dry, even during the rainy season, so the road was passable almost every month (most people who tried with a 4WD SUV said they got stuck though). If you prefer, you can also rent a bicycle at the Visitor's Center to ride the 17 kms to Nakum.

Another alternative would be to be driven to Melchor de Mencos and the next morning drive to visit the Naranjo area within the Parque Nacional Yaxha Nakum and Naranjo. It is best if the trip is done with a high axle 4WD during the wet months, as the bumpers and the underside of a low axle 4WD SUV will be shredded.

On the other hand, any vehicle, including tour buses, can easily reach Yaxha Visitor's Center and parking lot (although the road from the main highway is not paved, a 4WD is not required whatsoever).



Epiphytes and other plants on tree trunks as you climb the steps of location # 5 Pyramid Astronómica Mayor, between Plaza G and Plaza F.

Photography by: Nicholas Hellmuth, FLAAR Mesoamerica, Jan. 22, 2019, 5:38 p.m. Yaxha, Petén, Guatemala. Camera: Canon EOS-1D X Mark II. Lens: EF24-105mm. Settings: 1/320 sec; f/4; ISO 4,000.



MUCH MORE THAN A PARK

The Yaxha-Nakum-Naranjo National Park raises within its objectives the protection and conservation of the natural resources of the area, as well the conservation of the ancient Mayan cities. Thanks to its natural beuty, the inspiration is for this place to be attractive to visitors and a source of income for the communities. Its also aims to be a tool foe environmental education, scientific research and ecotourism, leveraging the natural potential that exists in this protected area.

That is why FLAAR Mesoamerica, with the support of the authorities that manage the park, has created the material you have in your hands, to generate interest amog students, researches and tourist visiting the area. FLAAR Mesoamerica has specialized in the photographic documentation of species of flora and fauna, and in the compilation of biological, botanical, ethnobotanical and ethnobiological research to make known the variety of natural resources that exist in the region.

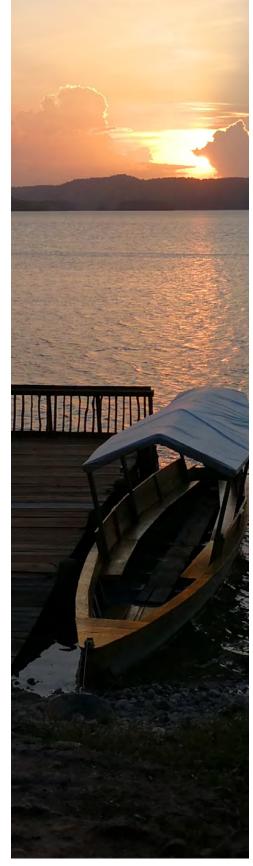
For more information:

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- www.destinoyaxha.com
- www.flaar-mesoamerica.org
- www.visityaxha.com







From the pier. Photography by: David Arrivillaga, FLAAR Mesoamerica, Jan. 5, 2019, 5:38 p.m. Yaxha, Petén, Guatemala. Camera: Huawei Pg.

SPECIAL ACKNOWLEDGEMENTS

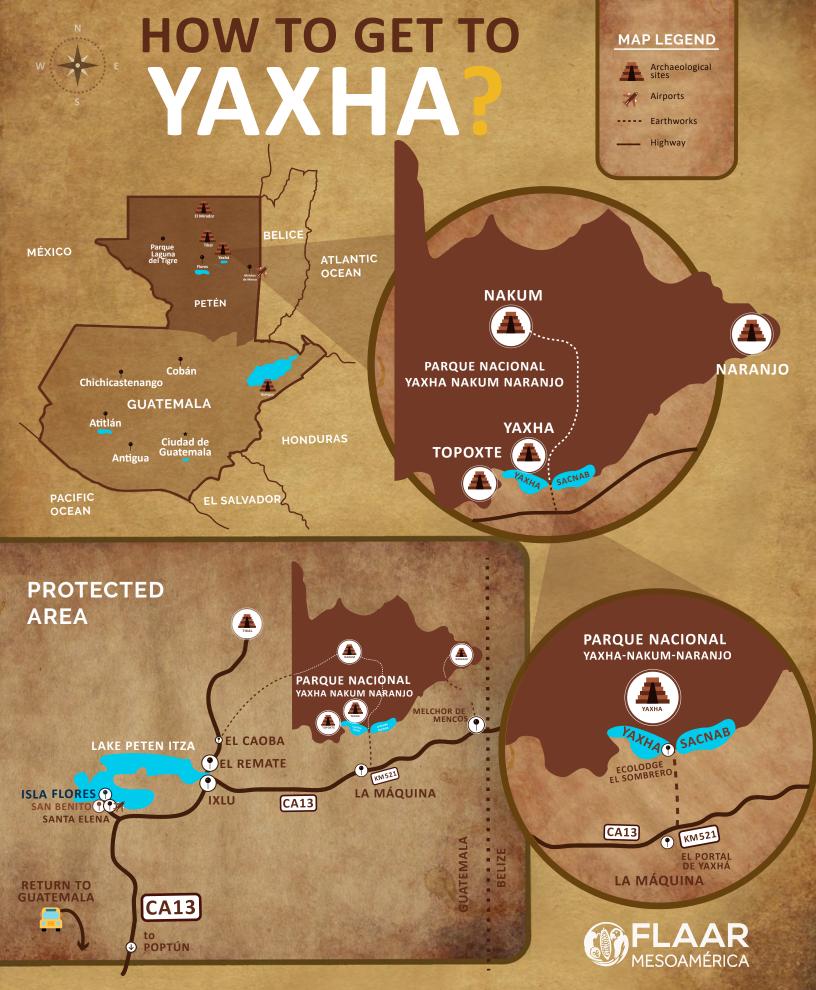
We thank

Lic. Leonel Ziesse –Coordinador Administrativo del Parque Nacional Yaxha-Nakum-Naranjo (DGPCyN / MICUDE) Ing. Jorge Mario Vazquez –Jefe del Parque (CONAP) Biolg. Lorena Lobos (CONAP) Arq. Jorge Mario Ortiz

All the helpful and knowledgeable guides of IDAEH CONAP who accompanied us each day. It is essential to have either an IDAEH and/or CONAP guardabosque or comparable when doing flora and fauna research.

We appreciate the 16 years of knowledge of birds and plants

of "Teco" (Moises Daniel Pérez Díaz). We also appreciate the assistance of park ranger Ricardo Herrera. It is essential to have either an IDAEH and/or CONAP guardabosque or comparable when doing flora and fauna research.





ACKNOWLEDGEMENTS TO FLAAR MESOAMÉRICA

The reports are a joint production between the field trip team and the in-house office team.

So here we wish to cite the full team:

Flor de María Setina is the office manager, overseeing all the diverse projects around the world (including FLAAR-REPORTS research on advanced wide-format digital inkjet printers, a worldwide project for over 20 years). We also utilize the inkjet prints to produce educational banners to donate to schools.

Vivian Díaz environmental engineer, is project manager for flora, fauna projects (field work and resulting reports at a level helpful for botanists, zoologists and ecologists, and for university students). Also coordinates activities at MayanToons, division where educational material for kids is prepared.

Victor Mendoza identifies plants, mushrooms, lichen, insects, and arachnids. When his university schedule allows, he also likes to participate in field trips on flora and fauna research.

Vivian Hurtado is part of our bibliography team. In addition, she also prepares blogs and articles for our websites with helpful information about the flora and fauna we document in our field trips and other topics we interested in.

Sergio Jeréz prepares the bibliography for each subject and downloads pertinent research material for our e-library on flora and fauna. All of us use both these downloads plus our in-house library on flora and fauna of Mesoamerica (Mexico through Guatemala into Costa Rica).

Andrea de la Paz is a designer who helps prepare the masterplan for aspects of our publications. She is our editorial art director

Senaida Ba is photography assistant for many years. She knows the Canon, Nikon and is learning the new Canon mirorless R5 and our four new Sony mirrorless cameras. She prepares, packs, sets-up, and helps the photographers before, during, and after each day's field trip.

Jaqueline González is a designer who puts together the text and photographs to create the actual report (we have several designers at work since we have multiple reports to produce).

Roxana Leal is Social Media Manager for flora and fauna research and publications, and MayanToons educational book projects

Maria Alejandra Gutiérrez is an experienced photographer, especially with the Canon EOS 1D X Mark II camera and 5x macro lens for photographing tiny insects, tiny flowers, and tiny mushrooms. Work during and after a field trip also includes sorting, naming, and processing. And then preparing reports in PDF format.

David Arrivillaga is an experienced photographer and is able to handle both Nikon and the newest Sony digital cameras. Work during and after a field trip also includes sorting, naming, and processing.

Juan Carlos Hernández takes the material that we write and places it into the pertinent modern Internet software to produce our web pages (total network is read by over half a million people around the world).

Paulo Núñez is a webmaster, overlooking the multitude of web sites. Internet SEO changes every year, so we work together to evolve the format of our web sites.

Valeria Avilés is an illustrator for MayanToons, the division in charge of educational materials for schools, especially the Q'eqchi' Mayan schools in Alta Verapaz, Q'eqchi' and Petén Itzá Maya in Petén, and the Q'eqchi' Mayan and Garifuna schools in the municipality of Livingston, Izabal.

Josefina Sequen is illustrator for MayanToons and also helps prepare illustrations for Social Media posts and for animated videos.

Rosa Sequen is also an illustrator for MayanToons and also helps prepare illustrations for Social Media posts and for animated videos.

Laura Morales is preparing animated videos in MayanToons style since animated videos are the best way to help school children how to protect the fragile ecosystems and endangered species

Heidy Alejandra Galindo Setina joined our design team in August 2020. She likes photography, drawing, painting, and design.

Maria José Rabanales she is part of the team for editing photographic reports and educational material of Flora and Fauna since September 2020. She works together with others of the team to prepare the finished pdf editions of the material of the Yaxha, Nakum and Naranjo Project.

Alejandra Valenzuela, biology student is now part of Flora y Fauna's photographic report and educational material editing team since September 2020.

Alexander Gudiel designer who join the editorial design team on December 2020. He will combine the text, pictures and maps into the FLAAR Mesoamerica editorial criteria.

Cristina Ríos designer student who join the editorial design team on December 2020. She will combine the text, pictures and maps into the FLAAR Mesoamerica editorial criteria.

Carlos Marroquín is a USAC graphic design student who volunteered to do his professional practice with the Editorial Design Team. We are very grateful with people like him who join our team and bring his knowledge and work.

WITH THE SUPPORT OF:









SERIES DE YAXHA, NAKUM Y NARANJO









Any school, college, university, botanical garden, zoological garden, botanical or zoological association (or club) may post this report on their web sites, (at no cost) as long as they link back to one of our web sites:

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BACK COVER PHOTOGRAPH:

Photography by: Andrea Sanchez, FLAAR Mesoamerica, Oct. 7, 2018, 5:51 p.m. Yaxha, Peté, Guatemala. Camera: Iphone 6.









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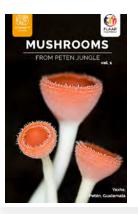
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